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NOTICE OF ALLOWANCE AND FEE(S) DUE

2292 7590 06/06/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747

| EXAMINER | | | | | |
|-----------------------|---|--|--|--|--|
| NORMAN, MARC E | | | | | |
| ART UNIT PAPER NUMBER | | | | | |
| 3744 | • | | | | |

DATE MAILED: 06/06/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|---|-------------|----------------------|---------------------|------------------|--|--|
| 10/541,590 | 07/07/2005 | Katsumi Sakitani | 4633-0140PUS1 | 7820 | | |
| ITTLE OF INVENTION: REFRIGERATION APPARATUS | | | | | | |

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$300 | \$0 | \$1740 | 09/08/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NOT THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. In equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| INSTRUCTIONS: This appropriate. All further a indicated unless correcte maintenance fee notificat | form should be used I correspondence includir d below or directed oth ions. | or transmitting t ng the Patent, ad nerwise in Block | he ISSU vance or 1, by (a | JE FEE and PUBLICATI rders and notification of n a) specifying a new corres | ON FEE (if requir naintenance fees wi pondence address; | ed). B ill be i and/or | Hocks 1 through 5 st mailed to the current (b) indicating a sepa | nould be completed when correspondence address a rate "FEE ADDRESS" fo |
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| PO BOX 747 | 7590 06/06 ART KOLASCH H, VA 22040-0747 | & BIRCH | | Lhe | Certify that this | ificate | of Mailing or Trans | mission deposited with the United t class mail in an envelope above, or being facsimile ate indicated below. |
| | | | | | | | | (Depositor's name) |
| | | | | | | | | (Signature) |
| | | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | | FIRST NAMED INVENTOR | | ATTO | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/541,590 | 07/07/2005 | | | Katsumi Sakitani | | 46 | 533-0140PUS1 | 7820 |
| TITLE OF INVENTION: | REFRIGERATION AI | PPARATUS | | | | | | |
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| nonprovisional | NO | \$1440 | | \$300 | \$0 | | \$1740 | 09/08/2008 |
| EXAM | INER | ART UNIT | | CLASS-SUBCLASS | | | | |
| NORMAN, | | 3744 | | 062-228100 | • | | | |
| "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME AT | ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA | nge of Correspon Indication form ed. Use of a Cus TO BE PRINTI | dence tomer | (I) the names of up to or agents OR, alternativ (2) the name of a singli registered attorney or a 2 registered patent attor listed, no name will be PHE PATENT (print or type data will appear on the pa T a substitute for filing an | rely, e firm (having as a segent) and the name meys or agents. If n printed. | membe s of up o nam | er a 2 o to e is 3 | ocument has been filed for |
| (A) NAME OF ASSIC | BNEE ate assignee category or | | not be pr | (B) RESIDENCE: (CITY | and STATE OR CO | DUNT | RY) on or other private gro | up entity 🚨 Government |
| 4a. The following fee(s) a Issue Fee Publication Fee (N Advance Order - # | o small entity discount p | permitted) | 41 | Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo | d. Form PTO-2038 authorized to charg | is atta | ched. required fee(s), any de | |
| | SMALL ENTITY state | is. See 37 CFR I. | | b. Applicant is no long | | | | |
| interest as shown by the r | Publication Fee (if requeended of the United Sta | uired) will not be tes Patent and Tr | accepte ademark | d from anyone other than the Office. | he applicant; a regis | tered a | ittorney or agent; or th | e assignee or other party ir |
| Authorized Signature | | | | | Date | | | |
| Typed or printed name | | | | | Registration No | | | |
| This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450. | EFR 1.311. The in U.S.C. 122 and : USPTO. Time v rden, should be so O NOT SEND FE | formation of the format | on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO | etain a benefit by th imated to take 12 m idual case. Any cor r, U.S. Patent and T D THIS ADDRESS. | e publ inutes nments fradem SENI | ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Depa D TO: Commissioner I | by the USPTO to process g gathering, preparing, and ne you require to complete utment of Commerce, P.O. For Patents, P.O. Box 1450 |

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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| PO BOX 747 | | ART UNIT | PAPER NUMBER | |
| FALLS CHURC | H, VA 22040-0747 | | 3744 | |
| | | | DATE MAILED: 06/06/200 | 18 |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 515 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 515 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | | | |
|--------------------|-----------------|--|--|--|
| 10/541,590 | SAKITANI ET AL. | | | |
| Examiner | Art Unit | | | |
| Dr. Mara E. Norman | 2744 | | | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to amendment filed 4/28/08.
- The allowed claim(s) is/are 5 and 6.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - i) ☑ All b) ☐ Some* c) ☐ None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 4/28/08
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. ☐ Notice of Informal Patent Application
- Interview Summary (PTO-413),
 Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other _____.

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REASONS FOR ALLOWANCE

Claims 5 and 6 are allowed.

The following is an examiner's statement of reasons for allowance:

As per independent claim 5, the prior art (and in particular the combination of Thuresson et al. and Meloling et al.) do not teach the refrigeration apparatus combination as recited, and in particular wherein when said control valve is in the fully closed state and the high pressure of said refrigeration cycle falls below said predetermined target value, said control means sets said second compressor in operation and regulates the capacity of said second compressor; and, when said second compressor is in the stopped state and the high pressure of said refrigeration cycle exceeds said predetermined target value, said control means places said control valve in the open state and regulates the valve opening of said control valve.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Marc E. Norman whose telephone number is 571-272-4812. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MN

/Dr. Marc E. Norman/

Primary Examiner, Art Unit 3744